# Designing AAC for Community Engagement

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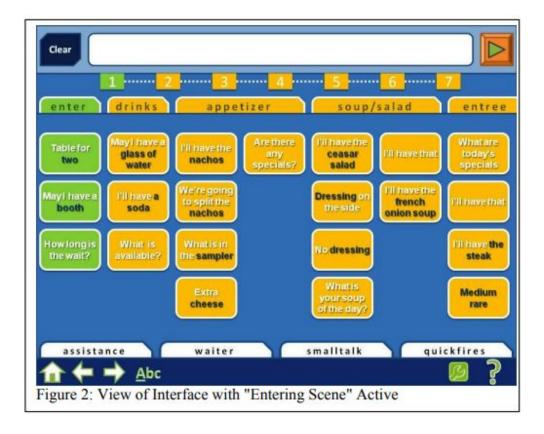
## Background

#### Social Context of Assistive Technology (AT)

- AT often designed for **functional** accessibility over **social** accessibility
  - Social Accessibility: "something that serves as a vehicle for conveying both ability and social identity"
  - (Shinohara & Wobbrock, 2016)
- Use of AT can impact social engagement and perception
  - (Shinohara & Wobbrock, 2016)
  - o AT breakdowns can cause unwanted attention and/or embarrassment
- Users of AT experience misperceptions, such as being helpless
  - o (Shinohara & Wobbrock, 2011)

#### **Social Context of AAC**

- AAC can limit personality expression, social communication (e.g., telling stories/jokes), and communication in public settings
  - (Kane, Morris, Paradiso, & Campbell, 2017)
- AAC can help with community engagement, but effective communication is needed
  - o (Cooper, Balandin, & Trembath, 2009)
- Some AAC designs take inspiration from public communication (e.g., eating at a restaurant)
  - o (McCoy, Bedrosian, & Hoag, 2010)



Utterance-based AAC design for eating at a restaurant (McCoy et al., 2010)

How can AAC be designed to support community engagement?

## **Proposed Study**

#### **Preliminary Study - Scoping Review**

- Systematic literature review on AAC and community engagement
- Search for:
  - Populations studied
  - AAC systems used
  - System design considerations
- What work does the extant literature show has been done in designing AAC for community engagement?
  - Set the stage for the next study

#### Main Study - Semi-Structured Interview

• Goal: gather qualitative data from people who use AAC

- Collect data on:
  - Definitions of community engagement
  - The positive/negative impacts of their AAC system
  - Desired system changes

#### **Example Interview Questions**

- How would you define community?
- How would you define *your* community?
- Does your AAC system help you engage with your community?
  - o If so, how does it help?
- Does your AAC system hinder you from engaging with your community?
  - If so, how does it hinder?
- What about your AAC system helps you engage with your community?
- What about your AAC system hinders you from engaging with your community?

#### **Use of Data**

- Data Collected:
  - Demographics
  - Details of current AAC system(s)
  - Conversational responses from participants

- Create a working definition of community and community engagement
- Discover guiding principles for AAC designs that will support community engagement

#### **Future Work**

- Use definitions and guiding principles to develop new AAC system designs targeted towards supporting and enhancing community engagement
  - Proof-of-concept and design validation
  - o Intervention with new design

### Discussion

## How to choose a population to be interviewed in this study?

## How to create a definition for "community engagement"?